

# White Swan Cleaners/Sun Cleaners Area Groundwater Contamination

## New Jersey

EPA ID#: NJSFN0204241

### EPA REGION 2

Congressional District(s): 04

Monmouth  
Wall Township

#### NPL LISTING HISTORY

Proposed Date: 4/30/2003

Final Date: 9/23/2004

## Site Description

The White Swan Cleaners/Sun Cleaners Area Groundwater Contamination site (aka Magnolia Avenue Groundwater Contamination site) is an area of groundwater contaminated with dry cleaning chemicals and/or their breakdown products, perchloroethylene (PCE), trichloroethene (TCE) and cis-1, 2-dichloroethylene (cis-1,2-DCE) in portions of three municipalities: Wall Township, Manasquan Borough, and Sea Girt Borough, New Jersey. The shallow, unconfined Kirkwood aquifer was contaminated by two different dry cleaning facilities, the former White Swan Laundry and Cleaners located at 1322 Sea Girt Avenue and the former Sun Cleaners, located at 2213 Route 35 (aka 201 Manasquan Circle) in Wall Township. The Sun Cleaners property is located approximately 0.3 miles southwest of the White Swan property. The two dry cleaners contributed the same volatile organic contaminants to the shallow, permeable, sandy aquifer. The plumes have commingled and are heading east towards the Atlantic Ocean. The facilities operated from approximately 1960 to 1991. Other potential sources of contamination may be identified during the Remedial Investigation, which began in the winter of 2007.

In 1995 and 1996 Phase I and II site assessments conducted at the Sun Cleaners location discovered PCE contamination at levels up to 7,400 milligrams per kilogram, (mg/kg) in the subsurface soils and PCE up to 200,000 micrograms per liter (ug/L) in the groundwater.

In August of 1997, a resident on Magnolia Avenue in Wall Township informed the Monmouth County Health Department (MCHD) that groundwater samples from his shallow irrigation well had PCE at levels up to 1,546 parts per billion (ppb). MCHD responded by resampling his well, along with 6 others and found PCE at levels up to 595 ppb. The New Jersey Department of Environmental Protection (NJDEP) determined the Sea Girt municipal wells were at risk and sampled them on a monthly basis beginning in August 1999. In September 1999 PCE was detected in one of them at a level of 0.54 ppb.

In 1999 NJDEP and MCHD initiated a groundwater investigation to identify the responsible parties. They identified White Swan Laundry and Cleaners as another potential source and they also delineated a groundwater contaminant plume 2.0 miles long and one mile wide that extended to the east. NJDEP sampled the indoor air of residential and commercial buildings in the vicinity of the White Swan site and found PCE and TCE at levels above the health based risk level. The case was referred to EPA in December 2001. EPA and NJDEP investigated hundreds of homes in the downgradient area and identified 28 homes that required "radon-like" air ventilation systems to effectively remove the contamination from the buildings.

In April 2003, NJDEP produced a report showing widespread PCE and TCE contamination from Manasquan Circle (route 35) east to the Atlantic Ocean. PCE was also found in the surface water stream east of the circle at levels of 996 ppb which was coming from the underlying shallow aquifer.

Site Responsibility: This site is being addressed through Federal, State and responsible party actions.

## Threat and Contaminants

The shallow groundwater contains dry cleaning chemicals; perchloroethylene (PCE), trichloroethene (TCE) and cis-1, 2-dichloroethylene (cis-1,2-DCE). PCE is a volatile organic compound, commonly used as a degreasing agent and dry cleaning solvent. TCE is also a dry cleaning compound and a degradation product of PCE, and cis-1,2-DCE is a degradation product.

## Cleanup Approach

The site is being addressed in two actions, a short term indoor air sampling program designed to identify any other buildings or residents that may have unacceptable levels of PCE or TCE vapors in their basements.

A longer term Remedial Investigation and Feasibility Study began during the winter of 2007. The field work was finished and the draft report is expected to be finalized in the Fall Spring of 2012.

### Response Action Status

Immediate Actions – Indoor air sampling for volatile organic compounds is used to identify structures with unacceptable levels of PCE, TCE and cis-1,2,-DCE. Residences and other buildings with unacceptable levels of PCE, TCE and cis-1,2-DCE get indoor air ventilation systems installed to reduce the concentrations to acceptable levels.

Source Control - In 2001, Bank of America, who purchased the White Swan Cleaners property, conducted investigations on the property and identified PCE contamination in the soils at 2,400 ug/kg , and PCE in the groundwater at 84,000 ug/L. Two old septic tanks and the associated seepage systems were excavated and removed in May 2001.

Long Term Response - The longer term Remedial Investigation will be conducted to discover the areal and vertical extent and nature of the contamination plume. The Remedial Investigation will be followed by a Feasibility Study to evaluate potential remedial actions to clean up the contamination and restore the aquifer to full use.

## Cleanup Progress

The sources, the septic tanks and seepage fields and associated soils were removed from the White Swan property by the new owners, Bank of America. The property around the Sun Cleaners has been characterized in April 2002. The building was demolished and removed.

## Site Repositories

Wall Township Public Library, Reference Section, 2700 Allaire Road, Wall, N.J. 07719

U.S.EPA Region 2, Records Center, 290 Broadway, New York, N.Y. 10007

Contact: Project Manager; Matthew Westgate (212) 637-4422 or the Community Involvement Coordinator, Cecilia Echols (212) 637-3678 or 1-800-346-5009